## **REMARKS**

Claims 44-58 remain in this application. Claims 44-58 are rejected.

Applicant herein traverses and respectfully requests reconsideration of the rejection of the claims cited in the above-referenced Office Action.

Claims 44-48, 50, 51 and 58 are rejected under 35 U.S.C. §101 because the claimed invention is allegedly directed to non-statutory subject matter. Applicant herein respectfully traverses this rejection.

Applicant respectfully submits that the "two prong" test applied by the Examiner is not appropriately applied to the rejected claims, since the subject matter of these claims does not constitute any of the exceptions to the subject matter properly deemed patentable as being covered by 35 U.S.C. §101. For example, the presently claimed invention falls into none of the exceptions referred to by the Examiner, and instead, clearly being directed to other than a "law of nature," "natural phenomenon" or an "abstract idea." To the contrary, the claims 44-48, 50, 51 and 58 each describes a process (synonymous with "method") for "analyzing customer behavior to determine a range of action of projected messages presented in a form of advertising," and recites concrete and tangible steps for measuring and analyzing physical action and for recording and correlating data obtained through such physical measurements.

It is unclear from the details of the rejection precisely in which category of non-statutory subject matter the Examiner is asserting that the rejected claims fall. Applicant believes, however, based upon the Examiner's reference to *Ex parte Bowman*, 61 USPQ2d 1669, that the Examiner is of the position that the claimed invention represents merely a "abstract idea" which "is not tied to any technological art, environment, or machine," and therefore allegedly does not constitute "useful or technological arts." Applicant respectfully traverses this position as being misapplied to the instant rejected claims.

As stated in MPEP §2106 (at page 2100-16), "Manipulation of Data Representing Physical Objects or Activities" is deemed statutory subject matter eligible for patent protection, where a "process causes a physical transformation of the signals which are intangible representations of the physical objects or activities. In re Schrader, 22 F.3d at 294, 30 USPQ2d at 1459. In the present instance, the claimed process steps are directed to a specific art or environment, i.e., that which is in connection with advertising and marketing. Applicant submits that there is nothing "abstract" about carrying out a series of concrete physical activities involving actual live participants, and converting the results of such defined set of real world actions into useful data which can provide tangible information relating to consumer buying practices. The subject matter of the rejected claims is to be clearly distinguished from the situation present in Bowman, where the facts therein, in stark contrast to the present claims, indicated that the applicant therein "carefully

avoided tying the disclosed and claimed invention to any technological art or environment," and where "the disclosed and claimed invention is directed to nothing more than a human making mental computations and manually plotting the results on a paper chart." Bowman, at 1671. A careful reading of Bowman makes clear that the BPAI's affirming of the Section 101 non-statutory finding was not based upon the lack of "structural limitations" such as "computer implementation," as asserted by the Examiner as the basis of the present rejections, but rather because the steps recited in the claims had no nexus with any particular field of endeavor, i.e., they lacked any indication of real world usefulness, and therefore did not constitute an invention directed to the "useful arts." Applicant knows of no requirement that a process claim contain "structural limitations" per se, other than that which may be necessarily related to the physical result or a specified subject matter upon which the method is performed. In this regard, it is abundantly clear that the subject matter of the rejected claims comprises individuals, messages, goods, etc., all representing physical properties which are converted into useful data representative of buying behavior relative to advertising.

Based upon the foregoing, reconsideration of the rejections of claims 44-48, 50, 51 and 58 under 35 U.S.C. §101 and their allowance are respectfully requested.

Claims 44 and 58 are rejected as indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter of the invention as a result of alleged lack of antecedent basis. Applicant respectfully traverses these rejections. The Examiner's attention is drawn to the preamble of each claim, which recites "analyzing customer behavior to determine a range of action of projected messages presented in a form of advertising...". Subsequent use of "the projected messages" in the claims is considered proper, as such term is already so introduced in the preamble. Therefore, reconsideration of the rejection of claims 44 and 58 and their allowance are earnestly requested.

Claims 44-56 and 58 are rejected as obvious over Frey (US 5,138,638) in view of Sizer et al. (US 5,923,252) under 35 U.S.C. §103(a).

It is respectfully submitted that a *prima facie* case of obviousness has not been established in the rejection of claims 44-56 and 58. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on the applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20

USPQ2d 1438 (Fed. Cir. 1991)." MPEP §706.02(j) "Contents of a 35 U.S.C. §103 Rejection".

Frey discloses the detection of potential customers in a range by counting in direct sequence persons passing by sensors at an entry an exit to determine a number of potential customers in the range at a given time. The Frey reference is directed to a system used in analyzing conversion rate of shoppers to actual customers. As explained in the background section of Frey, the conversion rate was conventionally determined, prior thereto, by counting all persons in a store during a particular period of time, and comparing this number to the number of actual purchases. The invention of Frey seeks to improve such approach by providing a means for distinguishing shoppers and non-shoppers from a general population in the store based upon selected criteria, such as height categories. In accordance with the disclosed system, for example, only persons over a certain height who pass a store location, such as an doorway, are counted as shoppers, and the remaining persons are considered non-shoppers, such as, for example, children and shopping carts. As such, Frey claims that a more accurate measure of the conversion rate is made possible.

It is openly admitted in the Office Action that "Frey fails to teach presenting the projected messages to the total number of potential customers while said potential customers are in said first range."

The Sizer et al. reference, which is offered by the Examiner as teaching what is admittedly absent from Frey, in actuality teaches a message delivery device which

selectively delivers a message only to a person who has shown an interest in a particular product which is displayed, not all potential customers present. The reference states in unequivocal terms that the presentation of a message indiscriminately to any and all individuals in the vicinity of a displayed product is considered to be unacceptable to practice of the invention. The reference clearly states that "[d]etection is not sufficient on its own to cause delivery of the message. If this were the case the message would be delivered to people who were perhaps not interested in the product." (See col. 2, lines 44-51). The invention of Sizer et al. instead mandates that a message will only be presented to a person who performs a particular action which demonstrates an interest on the part of that person for the associated product, such as providing a message only to a person opening a refrigerator door in a wine shop.

Thus, the Examiner's conclusion that Sizer et al. provides what is missing in Frey, i.e., teaching relating to the presenting of projected messages to the total number of potential customers while said potential customers are in said first range is unsupported by the actual reference teaching. It is respectfully submitted that the Examiner's arguments are fraught with inconsistencies, and wholly lacking of support in the actual disclosure of Sizer et al.. For example, the Examiner argues that on the one hand Sizer et al. teaches that "impact can be increased by first of all establishing that a person or persons is likely to be interested in a particular product or service and then delivering a message to that person" (referring to col. 1, lines 40-

45 of Sizer et al.), and then goes on to state on the other hand, without providing any support for such premise with reference to column and line number, that "Sizer would display messages to <u>all</u> persons upon detecting their presence in a detection range." (Emphasis added).

Applicant submits that one of ordinary skill would not arrive at the presently claimed invention by combining the Sizer et al. reference with Frey for the following reasons. In order to establish a prima facie case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings. In accordance with the disclosure of Sizer et al., the feature by which a message is to be presented exclusively to a person who performs a particular action which demonstrates an interest on the part of that person for the associated product, is to be considered essential to practice of the invention disclosed therein. Therefore, not only does the Sizer et al. reference fail to teach delivering of a message to all individuals within a range demarcated at least by an entry and an exit, but it further specifically teaches away from such approach by expressly advising against the wholesale dissemination of messages to all persons. It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one skilled in the art. Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve, Inc., 230

USPQ 416, 420 (Fed. Cir. 1986) citing *In re Wesslau*, 353 F2d 238, 241, 147 USPQ 391, 393 (CCPA 1965). Therefore, consideration must properly be given to teachings of the prior art which would lead one away from the claimed invention as well as those that might suggest the invention. *Mendenhall v. Astec Industries, Inc.*, 13 USPQ2d 1913, 1939 (Tenn 1988), *aff'd*, 13 USPQ2d 1956 (Fed. Cir. 1989). In the present case, one skilled in the art would not consider it advisable to disseminate information via a message to individuals absent some prior expressed interest, based upon a reading of Sizer et al..

The disclosure of Sizer et al. teaches a method according to which the presence of a person is detected when in a vicinity of a product ("proximate a predetermined object") or at a predetermined location and a message is delivered to that person if it is determined that there is an interest in the product (see col. 2, lines 29-38). Accordingly, a message relating to a particular product is only given to an individual based upon a proximity of that individual to a displayed product or detection at a predetermined location. Others present in a range, such a room or store, in which the product is on display, and who are not in the vicinity of the product (or at the predetermined location), and whose presence is therefore not detected, do not trigger the delivering of the message, and presumably these individuals do not necessarily receive the contents of the message directed to the individual near the product or at the predetermined location whose presence is detected. Thus, the message delivered in Sizer et al. is product-bound or location

specific, i.e., is given only to that person detected as present near the product itself or at a special location within a total range. Independent claims 44 and 52 of the present invention do not recite a requirement that the individuals in a range be detected at a particular location in the range or proximate an object of interest in order for a message to be delivered. Rather, the claims provide that projected messages are to be presented to the total number of potential customers while the potential customers are in the first range.

Moreover, neither Frey nor Sizer et al. contain teaching or suggestion to present an advertising message to all persons within a range directed to a particular product or service and then to subsequently compare the number of these individuals to another number representing a portion of these individuals who actually purchase the product or service to which the presented advertising message was directed. Therefore, the proffered combination of references could not possibly teach all claim limitations as properly required for establishing a *prima facie* case of obviousness. Frey merely teaches that, from a true measure of number of customers in a store, it is possible to determine how various in-store promotions and competitors' advertising affects a store's performance. For example, if the store runs a sale, or a competitor advertises a special promotion, the stores attendance overall is gauged against such factors. This can be used to establish a measure of store performance (col. 3, lines 27-35), but not the effectiveness of an in-store advertisement delivered to an entire measured population present as indicative of customer behavior in

relation to the advertising presented by the projected messages. The reference fails, therefore, to relate a particular in-store advertisement presented to a total of individuals in a range, to the advertisement's effectiveness in generating sales of product or service related to the advertisement, as presently claimed.

Applicant respectfully submits that Sizer et al. fails to adequately supplement this lacking disclosure. In particular, by showing an advertisement only to a person interested in the product, or at the very least (according to the background art) to a person detected near a product irrespective of interest, the effectiveness of an advertising message cannot be ascertained by relating a number of all persons in a range who receive such message to a subsequent measure of a total number of customers who purchase the advertised items after receiving the advertisement. Thus, if one skilled in the art were to combine the teachings of Frey and Sizer et al., while a total number of individuals could be determined at a particular time, not all of the individuals counted as present in the range would necessarily receive the message related to the advertised product, and therefore it would be impossible to determine which of the people in the range who were subsequently buying the product were doing so because of receiving the presented message. The presently claimed invention, in stark contrast, allows such comparative analysis, and is therefore not made obvious by the cited references discussed above.

In additional regard to claim 52, the claim is amended to recite that the computer is communicatively connected to each of the first and second sensors, the

display and the register, and that the computer controls the display automatically as a function of evaluated data received therefrom. Even if it were possible, in accordance with Frey, to collect all data concerning the purchasers and the sales on one computer, the computer therein does not control a display for offering messages. Instead, it is left to the store owner to make use of this data individually. The addition of a display, based upon Sizer et al., also does not indicate the claimed provisions of the invention, because Sizer et al. is concerned primarily with offering documentation concerning a sales object to an interested customer. The number of customers, the frequency of an offer and a changing of the offer do not play any role whatsoever in this connection, as they do in the presently claimed invention of claim 52.

With regard to independent claim 58 (and claim 50), the applicant has read the cited passages in Frey, and can find nothing therein which states that an exit of one range and an entry of another range form a connecting passage therebetween, or that a first range and a second range are interconnected via a passage. Rather, the Frey passage (col. 3, line 63-col. 4, line 8) merely discloses that the disclosed system can provide "one or more optics modules located at one or more selected locations at store entrances or exits, or within the store," such disclosure thereby clearly failing to teach or suggest any relationship between the multiple locations or even that they comprise "ranges."

Thus, it is respectfully submitted that the rejected claims are not obvious in view of the cited references for the reasons stated above. Reconsideration of the rejections of claims 44-56 and 58 and their allowance are respectfully requested.

Claim 57 is rejected under 35 U.S.C. §103(a) as obvious over the Sizer reference (US 5,923,252) in view of the Frey reference (US 5,138,638), and further in view of the Fraser reference (US 5,620,061).

It is respectfully submitted that the Fraser reference cannot render the rejected claim obvious because the reference does not provide the teaching noted above with respect to the obviousness rejection of claim 52, for which the claim depends. Thus, the reference fails to teach or suggest all the claim limitations. Therefore, reconsideration of the rejection of claim 57 and its allowance are respectfully requested.

Applicant respectfully requests a one (1) month extension of time for responding to the Office Action. Please charge the fee of \$55 for the extension of time to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper form for allowance of all claims and notice to that effect is earnestly solicited. Please charge any deficiency or credit any overpayment to Deposit Account No. 10-1250.

Respectfully submitted,
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